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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/721,233 | 11/22/2000 | Josef P. Debbins | 390086.94529 | 9735 |

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EXAMINER

GUBIOTTI, MATTHEW P

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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2124

DATE MAILED: 07/21/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/721,233

Applicant(s)

DEBBINS ET AL.

Examiner

Matthew Gubiotti

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 November 2000.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 November 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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DETAILED ACTION

1. Claims 1-19 are pending in this action.

Drawings

2. The drawings are objected to because they contain copy marks and hand written comments (See e.g. Figure 3). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1, 2, 5, 6, 13, 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Williams (U.S. Pat. 5,850,548) (hereafter Williams) and Vassallo et al. (U.S. Pat. No. 6,157,194) (hereafter Vassallo).

Claims 1 and 13

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Williams teaches an application development system substantially as claimed ("Visual Development Environment"; See Abstract;) comprising:

"a memory..." Williams teaches a system comprising memory on which to store computer-readable instructions (fig.1, refs 101, 102 and 109).

"a workstation..." Williams teaches a system comprising a workstation having a display, an input device and a processor programmed to perform application development (fig.1, refs. 106, 105 and 101; col.4, li.25-39).

"a component library..." Williams teaches a library (col.9, li.40-51; fig.5C) of software components written in an object-oriented programming language (col.5, li.38-41).

"a visual component..." Williams teaches an assembler for allowing users to select components in a framework area and assemble them in a workplace area to form an application program (fig.5C; col.9, li.14-38).

Williams teaches a system for developing task-driven applications for computer-controlled devices (col.1, li.14-23). Williams does not expressly teach developing software for a medical imaging system. Vassallo teaches a software control system for a magnetic resonance imaging (MRI) device (See Abstract; col.1, li.56 to col.2, li.3). At the time of the

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invention, the use of MRI devices for medical applications was well-known in the art, as illustrated in Vassallo (col.4, li.3-10). Furthermore, at the time of the invention it would have been obvious to one of ordinary skill in the art to incorporate the teachings of Vassallo into the system of Williams. The modification would have been obvious because one of ordinary skill would have been motivated to utilize visual software development techniques employing reusable components in developing control systems for medical imaging devices. This modification would reduce the need for technical proficiency in building software applications and allow for the rapid development and refinement of task-driven software applications, as taught by Williams (col.1, li.44-57) and suggested by Vassallo (col.1, li.56-62).

Claims 2 and 5

Williams further teaches wherein the assembler displays a properties area ("Component Inspector Window") and allows a user to select a component and display and modify the properties associated with the component (col.9, li.28-38; col.9, li.65 to col.10, li.2).

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Claim 6

Williams further teaches a property that invokes a visual representation of a component in a display (col.11, li.5-16; fig.6B, ref.617).

Claim 15

See rejection of Claim 2.

Claim 16

See rejection of Claim 5. It is inherent that in a computing system containing a workstation having an input device such as Williams, the input device is functional to input data into the system.

5. Claim 3, 4, 11, 12 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over William and Vassallo as applied to claim 1 above, and further in view of Johnson ("Serialization and the JavaBeans Specification", JavaWorld, February 1998, p.1-8) (available online at: <http://www.javaworld.com/javaworld/jw-02-1998/jw-02-beans.html>).

Claims 3, 4, 11 and 12

Williams teaches the use of an object-oriented programming language (col.5, li.38-41) and the hierarchical arrangement of

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components in an application development system (col.7, li.28-42) but does not expressly teach the use of Java™ or a Java™ object serialization mechanism in developing an application using components. In the analogous art of software development, Johnson teaches the use of a Java™ object serialization mechanism to enable components to persist in a software application (p.1, ¶ 2) (See also pp.2-3). At the time of the invention, it would have been obvious to one of ordinary skill in the art to incorporate the teachings of Johnson into the system of Williams and Vassallo. The modification would have been obvious because one of ordinary skill would have been motivated to use a well-known programming language technique to enable the persistence of data in a software application to eliminating complexity of save and restore operations and to reduce the complexity of transferring information between computing systems.

Claim 14

See rejection of Claim 3.

6. Claims 7-10 and 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Williams and Vassallo as applied to claim 1 above, and further in view of McDonald et al. (U.S. Patent No. 6,053,951) (hereafter McDonald).

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Claims 7-10

Williams teaches a property that invokes a visual representation of a component ("scroll bar") in a window on a screen containing the framework, the workspace and the properties are displayed (col.11, li.5-16; fig.6B, ref.617) (See also fig.6F, in which the multiple windows are displayed). Williams further teaches the real-time updating of properties in a display (col.9, li.59-63; col.9, li.67 to col.10, li.10) Williams but does not expressly disclose that the visual representation is a waveform displayed by a waveform plotter. In the analogous art of software development, McDonald teaches a system for graphical application development (See Abstract) in which a property window is functional to generate a waveform displayed by a waveform plotter (fig.28; col.25, li.3-9).

At the time of the invention, it would have been obvious to one of ordinary skill in the art to incorporate the teachings of McDonald into the method of Williams and Vassallo. The modification would have been obvious because one of ordinary skill would have been motivated to customize software to perform in accordance with the needs of the application. For an imaging application, it would have been obvious in the object-oriented (OO) software environment of Williams to use a waveform object, displayed by a waveform plotter, to track real-time changes in a

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system. The application-independent nature of the system of Williams (col.5, li.38-41) renders its application to imaging software obvious.

Claim 17-19

See rejection of Claims 7-10 above.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew Gubiotti whose telephone number is (703) 305-8285. The examiner can normally be reached on M-F, 8-4PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kakali Chaki can be reached on (703) 305-9662. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-7239 for regular communications and (703) 746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

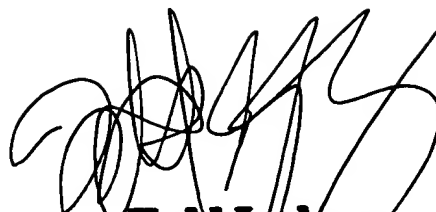
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MPG

July 8, 2003



Todd Ingberg
Primary Examiner
Group 2100